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ABSTRACT

Written for use with junior high school students, this handbook links natural ecological issues with language arts instruction. It contains a series of lesson plans, each offering a number of suggested learning activities for use both in and out of class. The lessons are built around 12 major environmental concepts that form a framework for each subject area. In addition, each lesson offers subject area integration, multidisciplinary activities, cognitive and affective behavioral objectives, and suggested reference and resource materials for both the teacher and student. (FL)

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ENVIRONMENTAL EDUCATION GUIDE

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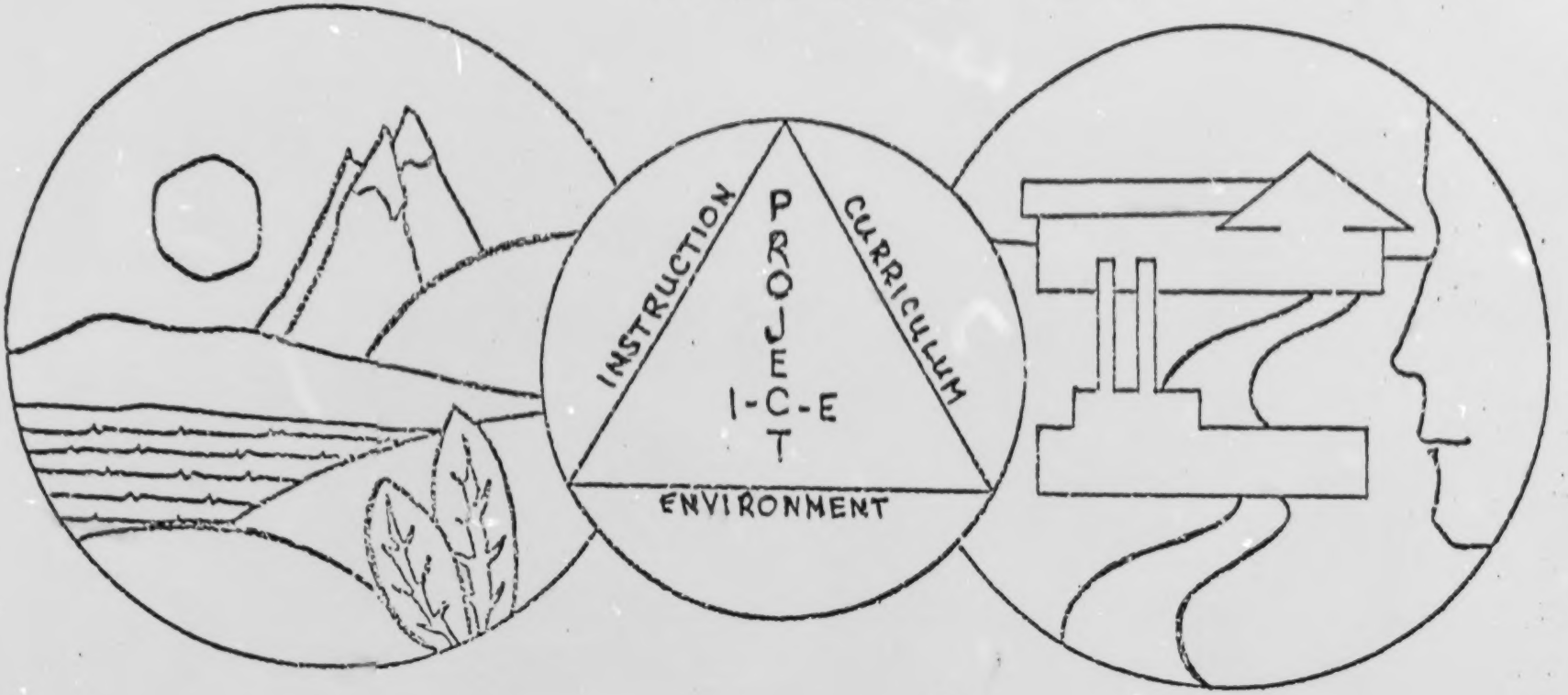

LANGUAGE ARTS 7-8

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FORWARD TO PROJECT I-C-E ENVIRONMENTAL EDUCATION GUIDES

In 1969, the First Environmental Quality Education Act was proposed in the United States Congress. At the time of the introduction of that legislation, I stated:

"There is a dire need to improve the understanding by Americans of the ominous deterioration of the Nation's environment and the increasing threat of irreversible ecological catastrophe. We must all become stewards for the preservation of life on our resource-deficient planet."

In the three years since the Environmental Education Act was passed by the Congress, much has happened in the United States to reinforce the great need for effective environmental education for the Nation's young people. The intensive concern over adequate energy resources, the continuing degradation of our air and water, and the discussion over the economic costs of the war against pollution have all brought the question of the environmental quality of this nation to a concern not merely of aesthetics but of the survival of the human race.

The intense interest by the public in the quality of our lives as affected by the environment clearly indicates that we cannot just use incentives and prescriptions to industry and other sources of pollution. That is necessary but not sufficient. The race between education and catastrophe can be won by education if we marshall our resources in a systematic manner and squarely confront the long-term approach to saving our environment through the process of education.

As the incessant conqueror of nature, we must reexamine our place and role. Our world is no longer an endless frontier. We constantly are feeling the backlash from many of our ill-conceived efforts to achieve progress.

Rachel Carson's theme of "reverence for life" is becoming less mystical and of more substance as our eyes are opened to much of the havoc we have wrought under the guise of progress. A strong commitment to an all-embracing program of environmental education will help us to find that new working definition of progress that is a pre-requisite to the continued presence of life on this planet.

- Senator Gaylord Nelson

LANGUAGE ARTS PREFACE

Youth need ecology and ecology needs youth. The natural, physical world in which young people live needs to be made relevant to their school studies. Young people have a completely absorbing interest in the world of nature around them. One of the reasons for this handbook is to attempt to link natural ecological issues with language arts instruction.

This environmental handbook is written for junior high school students. Although the twelve environmental concepts are scientifically oriented, the attempt here is to relate them directly to the various English skills--reading, writing, listening, speaking--all of which have as their purpose making the student a more capable functioning member of society.

An example of the specific skills presented in this handbook is that of writing. As is the case with each skill, the skills of learning to write, from working with the paragraph, through formulating the essay, to writing the research paper itself, are tied closely with an ecological concept. For example, the coherence, unity, and development of the topic sentence or thesis created in writing can easily be seen to be analogous to the importance of man's fitting into his ecosystem in a coherent, unified, directed manner. In short, the importance of the parts' relationship to the whole is vital both in writing--an English skill--and in the study of ecosystems--a survival skill.

More than ever before, man's capacity for survival is threatened by his inability to recognize the ecological destruction which he wreaks on his physical world. As true humanists, English teachers must be ready to help man see himself as one entity,a being with great capacities--mentally, physically, spiritually--for beneficial ecological growth. English teachers must not pretend, for example, that the beauty of fine verse, the finely tuned logic of an essay or a fictional work, have nothing to do with that "outside" world in which men live. We must help ourselves and others to see that beauty or ugliness of our physical world has a direct bearing on individual man's perception of beauty in literature. The skills of English, those uses of language which help us toward becoming more fully human,must be brought to bear on the creation of an ecologically sound, and therefore aesthetically pleasing, world. This, then, is the purpose of this handbook.

TABLE OF CONTENTS

Concept	Topic	Page No.
1	Library and Research	7
	Grammar - Free Poems	9
2	Speaking - Brainstorming	11
	Methods of Communication	13
3	Roleplaying & Simulation	15
	Science Fiction - Drama	17
4	Discussion	21
	Description and Summary Writing	23
5	Critical Reading - Writing	25
	Real vs. Imaginery Using & Kit Presentation	27
6	Critical Writing	31
	Oral Expression and Cooperative Planning	33
	Reporting and Observing	35
7	Oral Communications - Problem Solving through Group Work	41
	Word Usage	43
8	Reading-Narrative Writing	45
	Organizing a Speaking Skill	47
9	Letter Writing--Persuasive Speaking	49
	Advertising	61
10	Creative Writing	65
	Book Reports and Conferences	67
11	Reading Biography and Report Writing	69
	Reading - Creative Writing	71
12	Advertising Public Speaking	73
	Research, Written Report and Speech	75

E. S. E. A. Title III — PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 1 Energy SUBJECT Language Arts

ORIENTATION Energy TOPIC/UNIT Library and Research

BEHAVIORAL OBJECTIVES

Cognitive:

Compare and contrast the importance of the sun for past civilizations and modern times--through research, oral and written presentation.

Affective:

Suggest comparisons with American's adoration of the sun with ancient man's adoration of the sun. Through a study of previous sun worshippers.

Skills Used:

1. Use of books
   - Table of Contents
   - Appendix
   - Index
   - Pictures and cartoons.

(continued)

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Motivating Activity:

A. Using examples in mythology show sun's importance to people of that time.

B. Teacher-class discussion on feelings in and reactions to the sun, "Let The Sun Shine In."

C. Research Center
   1. Create a bibliography of reference books dealing with photosynthesis and the Egyptian sun worship.

D. Classroom Activity
   1. Creation of a chart of sun worship practices-legends, statues ceremonies.
   2. Discussion of man's reliance on the sun. Attempt to justify early man's feelings.
      Sample Questions:
      a. Why did man look to the sun as a god?
      b. What feelings does the sun give us?

E. Collect media examples stressing sun theme. i.e. Coppertone Sunkist Soda.

(continued)

Outside or Community:

A. Visit a greenhouse or have a florist speak on sun's importance in his buildings. Why do some plants not need sun?
Each student will write out an interview question for the florist or greenhouse visit.

SUGGESTED RESOURCES

Publications:

Books:
World Book Encyclopedia, Egypt
Life in the Ancient World
Random House, 1961
Magazines:
Popular Science
National Geographic
Popular Mechanics

Audio-Visual:

Films:
6949 Sun's Energy, color, 14 min.
Bureau of Audio-Visual Instruction
1327 University Avenue
P.O. Box 2093
Madison, Wisconsin 53701
Art Teacher

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

Skills to be Learned: (continued)

2. Use of reference materials
   Encyclopedias
   Readers guide
   Card Catalog
3. Organization skills:
   Note taking
   Making charts
4. Evaluation Information:
   Reading for a purpose
   Making inferences
5. Oral skills
   discussion and interview
6. Composition

In-Class: (continued)

F. Research concept of man using only sun for heat in homes and buildings. The University of Utah has a dormitory using solar power.

E. S. E. A. Title III — PROJECT I-C-E 59-70-0135-4

Environmental: Integrated with:

CONCEPT NO. 1-Energy SUBJECT Language Arts

ORIENTATION Energy Systems TOPIC/UNIT Grammar - Free Poems

BEHAVIORAL OBJECTIVES

Cognitive:

Use parts of speech and vocabulary correctly in an open ended poem using his environment as the basis.

Affective:

Support the idea that words are related through shades of meaning from one extreme to the opposite extreme (antonym) such as life to death.

Skills Used:

1. Word selection
2. Organization
3. Contrast
4. Students working together.

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

A. Diamante - a kind of poem in the shape of a diamond.

Noun
adj. adj.
participle part. part.
noun noun noun noun
participle part. part.
adj. adj.
noun

(Center four nouns related to both antonyms)

Example:

life
green bright
shining growing blooming
heat motion sun food
fading slowing dimming
brown old
death

B. Students read their poems in class. Poems will follow diamond-shape, Graphic or audio illustration of the poem's images can be optimal.

C. See ICE field activity guide on picture poems taken from Street Poems. Ideas are available using pictures within the written expression.

Outside or Community:

A. Student observations around school, home, community, and the media will provide ample suggestions for writing.

B. As an additional assignment, students can find their own patterns in the natural or man-made (urban or rural) world and use this shape for writing a second poem. (Kit #16 may provide ideas "Environmental Awareness," ICE office.)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Books:
Thesaurus.
Dictionary
Text Books

Audio–Visual:

Kit #16, Environmental Awareness from ICE office.

Community:

Example: Taken from Street Poems by Robert Froman (McCall Pub. Co.)

O F F A N D A W A Y

Little piece of paper on the ground.

Going nowhere.

Doing nothing.

Flat.

Little puff of wind.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 2 Ecosystem

SUBJECT Language Arts

ORIENTATION Man and Nature-Harmony or Discord.

TOPIC/UNIT Speaking - Brainstorming

BEHAVIORAL OBJECTIVES

Cognitive:

Compile a list of ideas through the technique of brainstorming, concerning the question:
What ways can man live in harmony with nature in the 20th Century?

Affective:

Suggest that the manipulation of one element in nature affects other elements in a brainstorming session.

Skills Used:

1. Brainstorming
2. List-making
3. Outside Observations
4. Small group work
5. Discussion

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Present to the group the techniques of getting ideas through "throwing out" ideas quickly and "freewheeling" to get ideas on the topic.

B. Form groups of five. Each group with secretary who will jot down ideas on a spiritmaster or ditto sheet. Using the technique of brainstorming, record the ideas on the question....What ways can man live in harmony with nature in the 20th Century?
   1. From the secretary's report the teacher will duplicate the ideas of each group to be shared with the rest of the class.
   2. Use master lists for class composition, journal entries, speaking assignments, or literary comparisons.

C. Use Make Your Own World game stressing interrelating elements of environment.

Outside or Community:

A. Students will find 5 examples locally of man living in harmony or discord with nature.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Group Dynamics A Source Book for Creative Thinking, Sidney Parnes & H. Harding, editors; Charles Scribner's Sons, publisher; New York. **Audio-Visual:** A. Game: Make Your Own World SG 4 ICE-RMC B. Kit: Man and His Environment In Harmony and In Conflict KT 34 ICE-RMC C. Kit: Crisis of the Environment KT 6 ICE-RMC D. Filmstrip: Communities of Living Things FSST 6 ICE-RMC **Community:**	

Environmental:

Integrated with:

CONCEPT NO. 2-Ecosystem

SUBJECT Language Arts

ORIENTATION Ideas and Words as Powerful Environments.

TOPIC/UNIT Methods of Communication.

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BEHAVIORAL OBJECTIVES

Cognitive:

Construct a form of writing, creative writing, poetry, short story, etc., that will express an interpretation of No Man Is An Island in terms of man and his environment.

Affective:

Accept that an idea can be expressed in many different ways.

Choose a method of expression (writing, speaking, reading, or combined media) and defend, attack, illustrate, or debate the concept: No Man Is An Island.

Skills Used:

1. Choosing area of communicative strength.
2. Fitting form to the idea.
3. Becoming acquainted with a variety of communicative methods.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Have student choose a form of writing, poetry, short story, student essay editorial, etc., to express his interpretation of the concept: No Man Is An Island.

B. In addition to or in lieu of A, have students choose a speaking form, debate, speech persuasion or dramatization, to project their interpretation of the concept.

C. Combined media of slides, tapes, music, photo's and quotes should be encouraged to accompany steps A and B.

D. Role play or pantomime being stranded on an island and the problems you'd encounter.

E. Have students go through their regular day and list their dependency on other people, community services etc.

Outside or Community:

A. Students may want to use areas of the community to photograph, tape record or interview depending on their selected method of expression.

B. Take the students to a newspaper office, ad agency, graphic arts studio or play to provide students with at least one verbal and one non-verbal method of communication.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual: Junkdump - Film #310, ICE The Stream - Film #320, ICE-RMC The Noisy Landscape - American Institute of Architects available at local chapter or Project ICE - RMC Film #170	
Community:	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 3 Carrying Capacity

SUBJECT Language Arts

ORIENTATION Mis-Use of Natural Resources

TOPIC/UNIT Roleplaying & Simulation

BEHAVIORAL OBJECTIVES

Cognitive:

Describe in a class discussion roleplaying and simulation, man's dependence and mis-use of resources when discussing an established list of man's needs.

Affective:

Question man's needs and his wants and how the two become confused, resulting in mis-use of resources.

Submit what he thinks are apparent discrepancies in the list of needs and what he feels are items that others think they need but do not.

Skills Used:

1. Research skills
2. Group communication
3. Critical analysis
4. Speaking activities
5. Brainstorming in small groups

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Develop with the students through individual research and compilations a list of man's basic needs.
   1. Taking the list of basic needs (unique in your class) begin a critical analysis of each, as to its actual degree of use. Is it being mis-used, over-used, etc?

B. Divide the class into small groups of 4 or 5. Have them roleplay being stranded in non-civilized area.

C. Students should then list their first concerns for survival and how environment plays a crucial part.

D. Each group should present to the class their lists of concerns and reasons for their selection.

E. Use Rescue in Space game, stressing utilization of limited supplies, SG 4 ICE-RMC

Outside or Community:

A. Research Milwaukee Sentinal's expose of DNR for concrete examples of mis-use of resources. Approximate date of publication June 11, 1974.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Books: Science Encyclopedias Textbooks Patterns of Living, Lyons and Carnahan Discussion and Debate, National Textbook Co. Speaking By Doing, National Textbook Co. **Audio–Visual:** A. Rescue in Space game Sg 4 ICE-RMC **Community:**	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 3 Population **SUBJECT** Language Acts

ORIENTATION Population Increase as Affecting Resources **TOPIC/UNIT** Science Fiction - Drama

BEHAVIORAL OBJECTIVES

Cognitive:
Write original scripts using a drama technique that will incorporate a story of family living in 2000.

Affective:
Accept the concept of population increases resulting in limiting resources.

Accept responsibility of completing his part of the task given to the group.

Skills Used:

1. Group work
2. Writing and presenting drama

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. "A Day in the Life of---" In groups of 4 students will develop skits along the theme of family living in the year 2000. Skits will stress using the following resources wisely: air, water, soil, space, energy. Teacher can suggest various dramatic techniques: comedy, dialog, narrator, soliloguy etc.

B. The Last Survivors is another option groups of 4 can roleplay being survivors in a world where the population has doubled and resources are cut in half.

C. Use of ICE field activity guide Good Evening Ladies And Germs? See p.19 for dramatic evaluation sheet.

Outside or Community:

A. Television commercials and community theater productions can be used to enhance the lesson.

B. Outside reading of short story and/or novel along science fiction lives may give good back ground material.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Ecofiction, a collection of short stories about futuristic events and possibilities. Bantam Paperbacks **Audio–Visual:** **Community:**	

Title of Show _____

Student Producers _____

Evaluation is based on a scale of one to five (five being the highest).

TECHNIQUE

	5	4	3	2	1	
Originality in use of technical equipment						Origin
Appropriate use of camera, music, pictures, etc. to help develop the ideas						Theme
Creating audience interest						Audience Interest
Appropriate transition from one part to another						Editing
THEME						
Keeping the central idea						Central Idea
Originality						Origin
Effectiveness of acting or use of images						Acting
Use of language (words and expressions for a special audience)						Language
BACKGROUND (if it applies)						
Sound effects, musical theme, background noises						Sound Track

Point Totals: 40-45 = Excellent
44-32 = Above Average
31-24 = Good
23-16 = Fair

Note to the Teacher: This scale may be duplicated for class use. Remember that this scale is only a suggested approach; it is optional and subject to change depending on your individual classes. Some teachers may elect not to use this scale, or to design their own scale. Perhaps your students can develop a scale more suitable to their particular "shows".

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: | **Integrated with:**

CONCEPT NO. 4 Water | **SUBJECT** Language Arts

ORIENTATION Water Pollution | **TOPIC/UNIT** Discussion

BEHAVIORAL OBJECTIVES

Cognitive:

Describe several types of water pollution in terms of:

a. Importance
b. ways of reducing and-or eliminating
c. whether primarily caused by individuals or industry
d. possible affectiveness of legislation

Affective:

Argue that water pollution is a serious problem, since an adequate supply of pure water is essential to life.

Skills Used:

1. Discussion
2. Observation
3. Compare and contrast
4. Creative writing

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. After viewing the film The Stream, students will react orally by expressing the feelings generated by the film. Some questions to initiate discussion might be:
   1. What is your major feeling after viewing the film?
   2. Why do you feel this way?
   3. List all forms of pollution seen in The Stream.
   4. What is your reaction to the gentleman with the sailboat?
   5. What are several important ideas that the film has for us?

B. They will discuss and become aware of ways that they pollute directly or indirectly.

C. Use Environmental Education Activity cards in the Water area for lists of learning activities. KT40 ICE-RMC

D. Play the Water Pollution Game SG 3 ICE-RMC

(continued)

Outside or Community:

A. Students will visit and observe local pollution areas and prepare to discuss their findings in class. Prepare a class discussion by comparing and contrasting their findings with their observations from The Stream.

B. Field trip to a local Paper Mill to question and observe use of Fox River in production

C. Contact following for ecology materials. Federal Water Pollution Control Office of Information U.S. Dept. of the Interior Washington, D.C. 20242

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

(Excerpts read by the teacher)
Sea Around Us-by Rachel Carson
Gift From The Sea - Anne Marrow Lindbergh
Walden Pond-Henry David Thoreau
The Fish - Elizabeth Bishop
White Water, Still Water
Allan Bosworth

Audio-Visual:

Films: The Gifts
Project ICE Resource Center
1927 Main Street
Green Bay, Wisconsin 54301
or:
U.S. Department of Interior
Federal Water quality Assn.
Office of Public Instruction
The Stream, ICE-RMC
Film 240: Rise & Fall of Great Lakes ICE-RMC
Film 250: Men At Bay ICE-RMC
Environmental Education Activity Cards KT 40 ICE-RMC (continued)

Community:

Audio-Visual: (continued)

Dirty Water: Water Pollution Game SG 3 ICE-RMC

Inclass: (continued)

E. Obtain Liquid of Life program from ICE office, Kit 47. Through slides and music virgin waters are compared to polluted waters stimulating students own comparisons through creative writing. Teacher guide available.

Environmental:

Integrated with:

CONCEPT NO. 4-Water

SUBJECT Language Arts

ORIENTATION Man's Dependence and Effect on Water

TOPIC/UNIT Description and Summary Writing

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	Outside or Community:
Cognitive: Organize and write a summary which is unified, coherent and developed. The topic will be "Man's Dependence and Effect on Water."	A. Read the elementary version of Rachel Carsen's The Sea Around Us, or other appropriate water theme books. 1. A summary of 100 words highlighting the chapter's main ideas should be written by the students for his assigned chapter. 2. Select and transcribe 10 of the most powerfully descriptive passages showing the positive and negative forces of water. 3. Have students exchange their summaries of consecutive chapters, e.g. summary of chapter 1 is exchanged for that of chapter 2. Each student reads and evaluates the shared chapter summary in terms of clarity of expression and understandability of the author's key ideas per chapter.	A. Observe a body of water and describe its properties factually in a summary and descriptively in a paragraph. B. Contact the following for more information. 1. Bay Lakes Regional Planning Commission Court House Green Bay, Wisconsin 2. Great Lakes Basin Commission P.O. Box 999 3475 Plymouth Road Ann Arbor, Michigan 48106
Affective: Suggests examples that illustrate words that can suggest feelings as well as facts.		
Skills Used: 1. Picking out descriptive phrases. 2. Summarizing.		

(continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Readers Guide for National Geographic 1973

Audio–Visual:

Kit 47
Liquid of Life ICE-RMC
Film 450 ICE-RMC The First Pollution
Film 240 ICE-RMC Rise and Fall of the Great Lakes

Community:

Environmental Protection Agency
Office of Public Affairs
North Wacker Drive
Chicago, Illinois 60606

In-Class: (continued)

4. The student writes a critique on the positive and negative aspects of the other student's summary.
5. Students exchange critiques and discuss critiques in conference. Teacher intervenes whenever appropriate.
6. On the basis of fellow student's critique, the face-to-face conference and teacher recommendation, each student will revise the summary, in whole or in part.
7. Revised summaries and selected powerful passages will be transcribed by the students on ditto sheets duplicated and collated for classroom distribution, sharing and discussion of the total book.

B. On the basis of this sharing, student can decide on reading the entire book, or illustrating non-verbally those passages which he find most powerful either from his selected quotations or from others.

C. Play Dirty Water: Water Pollution Game Sg 3 ICE-RMC

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Environmental:

Integrated with:

CONCEPT NO. 5 Air

SUBJECT Language Arts

ORIENTATION Air Pollution

TOPIC/UNIT Critical Reading - Writing

BEHAVIORAL OBJECTIVES

Cognitive:

Distinguish between fact vs. opinion in newspaper articles by labeling these articles as factual or opinionated, through critical reading.

Affective:

Support critical reading as a method which demonstrates that all material read in newspapers is not factual but in many cases, is the opinion of an individual.

Skills Used:

1. Distinguish factual material on air pollution from a paragraph composition using factual material and/or editorial material.

(continued)

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

A. Bring to class enough local newspapers and magazines that each student will have two to read and look for appropriate articles.
   1. Teacher will xerox several articles that demonstrate opinion and articles that demonstrate fact to develop student's awareness of these language differences.
   2. After reading articles on air pollution, each student will write a paragraph expressing his opinion of air pollution, as exists in his community.
   3. Students will then research factual material on air pollution and write a paragraph that is based on pure facts.
   4. Class discussion held on which type paragraph students found most difficult to write and why. Each student will volunteer

(continued)

Outside or Community:

A. Have a newspaper reporter or editor speak to the class on writing editorials (which are that editor's opnion).

B. As a presentation for the factual side, have a teacher in the field of science present facts on air pollution.

C. Have students observe a smoke stack or other sources of discharge, and write factual description. Then have students research laws governing the pollution and contact the offending company for the facts.

D. Ask for Educational Packet from: Environmental Protection Agency Office Public Affairs.
   1 North Wacker Drive
   Chicago, Illinois 60606

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Newspaper articles.
See ICE vertical file listings for more articles and publications.

Audio–Visual:

Film: The Second Pollution #460 ICE-RMC
Simulation Game: SG 1 ICE-RMC
Smog; Air Pollution Game

Community:

Have newspaper writer or editor visit class.
Write to following for more information.
National Air Pollution control Administration
Office of Education & Information

(continued)

Skills To Be Learned: (continued)

2. Effective critical reading is analyzing and categorizing material.

In-Class: (continued)

or be required to read orally both of his paragraphs which will enable all of the class to share opinions and facts on air pollution.

B. Use Environmental Education Activity Cards in the Air area for more learning activities. Kt 40 ICE-RMC

Community: (continued)

U.S. Dept. of Health, Educational and Welfare
801 N. Randolph Street.,
Arlington, VA. 22203

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Environmental: **Integrated with:**

CONCEPT NO. 5 Air **SUBJECT** Language Arts

ORIENTATION Using the Invisible as Reality **TOPIC/UNIT** Real vs. Imaginery using & kit Presentation

BEHAVIORAL OBJECTIVES

Cognitive:

Write and perform a one-act play revolving around the airy reality of the invisible in a group project.

Affective:

Value the real surroundings as a stimulus for creation of an imaginative environment by writing a short play, story, etc., which uses the environment as the setting or theme.

Skills Used:

1. Discussion
2. Gathering background information
3. Group work

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Teacher introduces (Hero's-clytes) concept of reality as composed of Earth, Air, Fire and Water. After introduction, teacher leads discussion around the idea of what determines reality. Possible questions like:
   1. Is Heroclytes right?
   2. If not, what's wrong?
   3. What do you think reality is made of?
   4. Why? Support your theory.
   5. Are invisible things real? Memories, Ghosts, ESP, Ideas, Feelings, Values.

   Depending on class reactions other questions will follow.

B. Have students discuss and write reactions and examples of "We're more attached to things invisible than visible."

C. Have students discuss human personalities and how individuals can be considered to be made up of "fire" or water, etc. dependent on temperments.

(continued)

Outside or Community:

A. Students will itemize four real places, people or things that could stimulate a story, play, poem or other imaginary creation.

Note to teacher: This suggests follow-up writing/speaking activities which the teacher may want to pursue.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES	28

Publications:

Street Poems-by Robert Froman, The McCall Publishing Company, New York.
Ray Bradbury publications

Audio–Visual:

The Open Window, 12 min., color, Green Bay Board of Education.
The Tell Tale Heart, 20 min., BAVI #2195

Community:

In-Class: Continued

D. Use the film-The Open Window or literary samples of Poe, Dickens, Shakespeare, non-fiction, newspaper accounts of UFO, Rippley's Believe It or Not, Great Ghost Stories (paperback), Irving's Legend of Sleepy Hollow, to provide input for extra student reading and a trip to the library.
After student reading around the theme of the "invisible" the teacher divides the class into 4 groups who will write and perform a one-act play or skit illustrating or disputing or modifying the idea that "things invisible are real."

E. After all performances, teacher repeates Heroclytes' idea and establishes by analogy that air can be a symbol of invisible reality. This type of closure may (spin off) result in individual student writing: journal entries, poetry, essay, persuasive speeches.

F. Have students complete value auction sheet (ICE-RMC) assigning priorities to the real and the abstract. This may best be accomplished in small groups.

ENVIRONMENTAL VALUES AUCTION

On the reverse side are listed 20 items to be sold at auction to the highest bidder, according to the following rules:

1. You are to pretend that you presently have none of the items listed.

2. You have a total of $5,000 to spend.

3. You can spend no more than $2,500 on any one item.

4. Bids must open at no less than $50 and no more than $500, and must proceed by increments of no less than $50 and no more than $100.

NOTE: This auction is not a measuring device. It helps to clarify value priorities and valuing processes and to stimulate dialog about same, nothing more. Individuals are encouraged to experiment with this game, modifying its content and its procedures in any ways that seem appropriate. A user's manual is in preparation, and if you would like to share your experience with this game (or benefit from that of others), please write

The Center for Curriculum Design
P.O. Box 350
Evanston, Illinois 60204

Adapted from pp. 21-22 of the Human Potential Seminars Participant's Workbook, by James D. McHolland and Roy W. Trueblood, Kendall College Press.

30

	Initial $5000 Budget	Highest Amt. I Bid	Top Bid
A long life free of illness			
Travel and tickets to any cultural or athletic events, as often as you wish			
The love and admiration of friends			
Television			
An unspoiled natural setting for your home			
Complete self-confidence with a positive outlook on life			
A complete library for your personal use			
A happy family relationship			
An automobile			
A large fruit and vegetable garden			
A very satisfying love relationship			
The ability to speak many languages			
A chance to eliminate sickness and poverty			
Electricity			
A chance to preserve endangered species			
An understanding of the meaning of life			
Unlimited funds for the enjoyment of music			
A world without prejudice			
Commercially canned and frozen foods			
A world without air and water pollution			

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 6 Resources **SUBJECT** Language Arts

ORIENTATION Environmental Quality of Life **TOPIC/UNIT** Critical Writing

BEHAVIORAL OBJECTIVES

Cognitive:

Formulate conclusions on the issue that eight environmental changes made by man may damage plants and animals and upset the ecological balance based on situations and examples compiled in a buzz session.

Affective:

Discern the constantly shifting environmental factors that affect the quality of a natural setting.

Promote the beauty of a pond and a sense of responsibility for its preservation by speaking to others to obtain their cooperation.

Skills Used:

1. Discussion
2. Buzzing
3. Factual Writing

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Write a 50-100 word paragraph describing types of change.
Describe something in a city or area that is:
   1. Changing at a predictable rate
   2. Changing at an unpredictable rate
   3. Increasing in quantity
   4. Decreasing in number
   5. Changing in form and
   6. Changing in size not in number
   7. Changing due to nature
   8. Changing due to artificial conditions.

In their paragraphs, students should aim for specific details possibly including illustrations, posters, photographs, drawings, maps, or blueprints.

B. Give reasons for the changes described.

C. Students respond orally or in writing to the questions which changes are positive, and which are negative concerning the area you described?

(continued)

Outside or Community:

A. Choose an area in your neighborhood that is changing, or will be changed.
Report its contents according to the eight criteria listed under In-Class activities.

B. Use field activity guide available through ICE, Here Comes The Judge.

C. Use field activity guide available through ICE, Go Solo--Then Shape and Share.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Wide, Wide World of Literature, The Loon-by Henry David Thoreau

Audio–Visual:

Film:
World In A Marsh, Consulate General of Canada Film Library, 310 S. Michigan Avenue, chicago, Ill 60604

Community:

High School Biology teacher (Could talk to the class about life in a pond.).

In-Class: (continued)

D. In your weekly journal answer the following questions:
   1. How many ways are you changing?
   2. How many ways are you intending to change?
   3. What are the reasons for your change?
   4. Do you think change is good for an individual?

E. Display all the descriptions and their illustrations.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 6 Resources **SUBJECT** Language Arts

ORIENTATION Natural Resources, **TOPIC/UNIT** Oral Expression and Cooperative Planning

BEHAVIORAL OBJECTIVES

Cognitive:

Develop a project for the collecting of cans and bottles for recycling, through the use of posters, speeches, letters, and planning in a class meeting.

Affective:

Evaluate the amount of materials used by a household and community. Promote concern for conservation of material resources by preparing a can or bottle for recycling.

Skills Used:

1. Organization and planning of a cooperative effort.
2. Conducting a meeting and involving every member of a group.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Have speaker from Concerned Households in Green Bay address class on how they got their project started. Each student should have a question for the speaker.

B. Recycling Resources Kit, SG ICE-RMC gives student knowledge and skills to start own recycling program. Complete with 2 color film strips, record, student handbook and teacher's manuel.

C. The Ecolopis game is also included in the kit, which emphasizes production, consumption, and pollutive waste.

D. Use the Garbage Game to make students aware of household waste.

Outside or Community:

A. Make arrangements for disposing of bottles and cans collected, i.e. establish a business relation with a collecting point.

B. Learn how to sort materials according to salvage specifications.

C. Learn to identify materials.

D. Pursue the steps through which salvage materials pass in producing a new product.

E. Be alert to any other waste materials and possibilities for recycling.

F. Contact UWGB and inquire into their methods of recycling possibility of promoting their program through publicity campaign in class.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual: Kit Sg 6 Recycling Resources ICE-RMC Kit Sg 12 Garbage Game ICE-RMC	
Community: Resource people who are connected with an phase of recycling of salvage materials.	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 6 Resource **SUBJECT** Language Arts

ORIENTATION Language and Resources Affecting Commercial Areas **TOPIC/UNIT** Reporting and Observing

BEHAVIORAL OBJECTIVES

Cognitive:

Describe several factors usually found in ineffective uses of language and visual communication and give an example of each, from the field of the environment.

Affective:

The student will, acting as a newspaper reporter, select an area of his community and will observe and report on both the effective and ineffective use of language and visual communication.

Skills Used:

1. Observing.
2. Reporting
3. Evaluating
4. Connotation
5. Denotation
6. Role-playing

(continued)

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Teacher and students will decide on a commercial area of the city such as the downtown area, shopping centers or main streets to be investigated by teams of students.

B. Armed with a notepad, pencil (possibly tape recorder), and well thought out questions, the team will walk their area, select and transcribe both effective and ineffective use of language and resources. (Six of each) Possible questions and examples:
   1. How much necessary and unnecessary lighting is used?
   2. How is language used to catch the consumer's attention?
   3. How do pictures add to a written message?

C. Upon returning to class, reporters will be grouped into teams as designated by street boundaries or by direction in relation to school (N.E.W.S. teams) e.g.

(continued)

Outside or Community:

The bulk of this activity will be performed outside of the classroom, walking to and from school.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES	36

Publications:

Preschool Primer: Your City Has Been Kidnapped, P. 51,
W. Ron Jones, Project ICE
Stop, Look and Write,
Bantam Paperback
Pictures for Writing: A Visual Approach to Composition by
David A. Sohn, Bantam Books

Audio-Visual:

"Billboards and Signs"
ICE-RMC

Community:

In-Class: (continued)

Using the panel method sectional teams will report and demonstrate verbally and graphically, if possible, their choices of the best investigative examples. Panel will summarize how effectively their area used language; whether it was harder to find positive examples or not. Teacher will act as T.V. interviewer. Use ICE field guide "Here Comes The Judge" p. 2 Idea #1-7 for lead questions.

D. Possible follow-up activity: Teams can rotate to judge initial evaluation of particular area or section.
E. Using the same assigned areas in the community, students will walk down the street and imagine themselves in a new role (as a banker, a policeman, a merchant, a poet, a teacher, a priest, a secretary, a dreamer. How do such roles change one's point of view? What ideas, feelings, or senses are changed or stressed due to a change in role?
F. Upon returning to the classroom, the student will be interviewed by the teacher and fellow students who will all prepare at least one question.
G. Use ICE field guide "Billboards & Signs." See complete lesson attached.

Skills used: (continued)

7. Point of View
8. Interviewing

Project I-C-E
Serving Schools in CESA's 3-8-9
1927 Main Street
Green Bay, Wisconsin 54301
Robert Warpinski

BILLBOARDS AND SIGNS

An Environmental Activity for Grades 5-12

Integration Potential

1. Social Studies
2. Mathematics
3. Art
4. Language Arts

Concepts Involved

1. Energy
3. Carrying Capacity
8. Values and Attitudes
9. Manage, Manipulate, Change
11. Individual Acts
12. Stewardship

Introduction

Advertising billboards, sales promotion, informational, and directional signs are a part of our everyday life. They vary only in number and intensity in different types of communities. There is a need and a purpose for signs and billboards ranging from providing necessary information to pure and simple economic exploitation. In the worst sense, they can create a monster called visual pollution that is both a real physical threat and an affront to our aesthetic senses. The issue then is to discriminate between what is necessary and desirable and what is unsightly and offensive in the number, kind, and type of signs and billboards. To accomplish this we need to focus and sharpen our senses of perception and visual discrimination. And finally, when necessary, we must be committed to some action in a rational way, at least to be able to offer some suggestions for improvement.

Billboards and Signs - Activity Worksheet
(Individuals or teams of 3-5)

1. Identify the area limits of survey -- draw a sketch of the streets, label them.

2. Take one, or several, pictures from a vantage point that best takes in the survey area: Locate your vantage point on sketch above by a ⊗ .

3. Tally of commercial signs:

a) Identify type of business	b) Number of signs for each
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
Total Number _____	Total Number _____

4. Tally of public control, direction, information signs

a) Identify kinds of signs	b) Number of each kind
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Number of Kinds _____ Total Number _____

5. Count and describe any other signs or billboards in the area not included in Items 3 or 4:

a)

b)

c)

d)

e)

6. From the list of signs/billboards noted before

a) Select one most necessary and explain why:

b) Select one most unnecessary and explain why:

c) Select one most attractive and explain why:

d) Select one most unattractive and explain why:

7. Select one commercial establishment, critique its use of signs and make suggestions for improvement.

8. Comment briefly on total perception, recommend any improvements you would make and tell why.

Resources: I-C-E RMC

115 Jo — DeSchool Primer: Your City Has Been Kidnapped

120 0 — GEE, Our Man-Made Environment, Book 7

Film — Noisy Landscape, 13 1/2 min., color
(Donated by NEW Chapter, American Institute of Architects)

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 7 Land Use

SUBJECT Language Arts

ORIENTATION Population

TOPIC/UNIT Oral Communications - Problem Solving through group work

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	Outside or Community:
Cognitive: Choose the group size which has the best "lines" of communication involving the greatest percentage of participants actively discussing the topic, after being involved in various sized groups.	A. Teachers and students will brainstorm the types of recreation that directly uses the land. Ideas are placed on the chalkboard, for example: 1. Mini bikes 2. Snowmobiles 3. Sking 4. Trailer campers B. Given these ideas, the class can choose methods of presentation which will have a definite position on a form of recreation Options include: 1. Debate 2. Promotional ads 3. Factual report 4. Anti-campaign, etc., C. Play Simulation Game #4, Make Your Own World, ICE-RMC D. Or play Land Use Game-Kit #25 ICE-RMC	
Affective: Demonstrate the value to group of population size and its effect on communication, by setting up the seating for optimum discussion to take place when the class is assigned a discussion topic.		
Skills Used: 1. Group discussion 2. Small group work 3. Problem solving		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Speaking by Doing National Textbook Co. Skokie, Illinois **Audio-Visual:** Simulation Game: Planet Management, Sg 7 ICE-RMC **Community:**	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 5 - Air **SUBJECT** Music, Physical Education and Art

ORIENTATION Can We Write Pollution Verses to Songs? **TOPIC/UNIT** Pollution Songs

BEHAVIORAL OBJECTIVES

Cognitive:

Write lyrics dealing with air pollution to fit the rhythmic patterns for a given known melody.

Affective:

Participate in creating a song or poster illustrating the need for clean air.

Skills Used:

1. Writing lyrics

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Music
- A. Review a familiar song.
  1. Blue Tail Fly
  2. My Bonnie Lies Over the Ocean
  3. Where, O Where Has My Little Dog Gone
  4. Twinkle, Twinkle, Little Star
  5. London Bridge Is Falling Down.
- B. Discussion related to air pollution listing responses on the board.
  1. What do you like about clean air?
  2. What do you like about the blue sky?
  3. What does polluted air look like?
- C. Write new words to the familiar melody - along the line of air pollution.

II. Art
- A. As a follow-up to the music lesson:
  Create a poster to communicate why we need clean air; use all cut or torn letters, substitute magazine pictures for some letters or words.

Outside or Community:

I. Physical Education
- A. Play "Here Comes 3000 Men to Work" only adapt to "Here Comes 3000 Men to Pollute".

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 8 Values and Attitudes

SUBJECT Language Arts

ORIENTATION Attitudes

TOPIC/UNIT Reading-narrative writing

BEHAVIORAL OBJECTIVES

Cognitive:

Creatively write through a dialog narration, or letter, how the cultures of the white man and Indian create different values and attitudes toward their environment.

Affective:

Support the argument that different cultures will produce different values and attitudes by presenting examples in support of the argument.

Skills Used:

1. Writing letters.
2. Reading for details.
3. Determining point of view.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Read the story, Light In The Forest, by Conrad Richter.

B. Discuss True Son's attitude toward the white Man's civilization. How are his attitudes as an adopted Indian different from his brother Gordy's attitudes? Cite examples from the story to support each statement.

C. Write either:
   1. A dialog narration between True Son and Gordy about their choices in the way of life. Present them to the class.
   2. A letter of at least one page. Choose one character's point of view and write in that character's style using the first person (I, mine, my, me). Choose a special audience (another Indian, white man, teenager of today, etc) Jot down at least two

(continued)

Outside or Community:

A. Contact the social studies teacher and find out what countries are being studied or have been studied. Have the student take on a first person point of view and present a written narration for the class concerning a country's culture.

B. Contact an AFS student from a high school to speak to the class on their impressions of America as compared to their homeland.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Wisconsin Historical Society Articles on Indians, Wisconsin History. **Audio-Visual:** Film: The Light in the Forest Film: Still Waters-510 ICE-RMC **Community:**	In-Class: (continued) topics, Make sure they're important and have the teacher check them over before the student starts writing. Suggest that the students reread the story for ideas and quotations which could be included in the letter. The students should become very familiar with the character they are writing for. D. View the film Still Waters and have the students take on the point of view of the fish. Use step #3 below from ICE field activity guide Come Fly With Me. Step #3 Find a comfortable log, rock, or grass pad and sit down. Collect your ideas and write about yourself as if you were the fish (or other creature). You may begin with: "I am..." or start with a question, sound, smell, or scene; you decide. You may write a poem, story, letter, description or speech. Take your pick--whatever you do best. Just try to cover these ideas--in any order you like. Tell us: Where you live (describe its size, shape, color, position) Why you live there (give some good reasons) Who your neighbors are (name some if you can) How you help other plants and animals (what do you do for them) What you feel towards people What special feelings you had today E. See ICE field guide activity sheet, "He Said What? Well, Here's What I Think!" for paraphrasing skills and creative writing ideas. Junior high teachers will have to adjust/adapt quotations to suit the particular class.

E. S. E. A. Title III – PROJECT I-C-E 59-70-0135-4

Environmental: **Integrated with:**

CONCEPT NO. 8 Values and Attitudes **SUBJECT** Language Arts

ORIENTATION How Values Shape Our Lives **TOPIC/UNIT** Organizing a Speaking Skill

BEHAVIORAL OBJECTIVES

Cognitive:
Explain how persons, places or things can affect a person's future behavior toward an object or idea and how this can be used in planning a promotional campaign to Save The Environment.

Affective:
Suggest that a variety of factors have influenced his behaviors and expressions.

Express verbally along with possible graphic illustration, a person, place or thing which influenced him the most in his behavior towards his environment.

Skills Used:
1. Choice of expression
2. Critical thinking
3. Speaking and writing skills
4. Selecting form to fit the message

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Teacher presents the idea: "An environment is anything which is influencing, or being influenced by, something else," by writing it on the blackboard, or on paper. Teacher uses autobiographical examples from the past and the present to realistically support the idea, e.g. When I was 13, the chief influences in my life were .... e.g. Right now, your attention, abilities, and interests are determining my plans for next week.

NOTE: Other more objective examples can be of a literary, historical or social nature.

B. Student will choose from the following list a method of presentation to show their biggest influence. The final expressions may include a wide range of speaking and writing techniques. A list of these optional techniques should be made available to the students.

(continued)

Outside or Community:

A. Teacher may want to work with the Social Studies teacher.

B. Have students select an older person they admire or wish to emulate. Have them interview that person along the lives of obtaining guides or suggestions for their own life.
Sample Questions:
1. What were you like when you were my age?
2. Did you always want to be a doctor, lawyer, nurse etc.,?

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: You Are An Environment: Teaching and learning environmental attitudes by Noel McInnis, Published by The Center for Curriculum Design P.O. Box 350 Evanston, Illinois 60204 **Audio–Visual:** **Community:**	In-class: (continued) 1. Cause and effect 2. Creative writing 3. One-act play 4. Radio or T.V. show 5. Interview - This is you life 6. Letter to a friend 7. Combination verbal and graphic including slide-tape presentation 8. Personality diagram or map 9. Chart of person, places or things done in style of a family tree Teachers should hold individual conferences with students to guide their task, assess their progress and organize the final product.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 9 Management

ORIENTATION Environmental Quality For Man

Integrated with:

SUBJECT Language Arts

TOPIC/UNIT Letter Writing-Persuasive Speaking

BEHAVIORAL OBJECTIVES

Cognitive:

Analyze information stating pollution efforts of two states and compare and contrast the efforts.

Prepare a special speech that will attempt to persuade persons that more should be done by our state agencies in pollution control.

Affective:

Will write to several cities in each of two states to determine the effects of population and industry on the environment.

Accept the idea that there are many desirable places to live.

Skills Used:

1. Letter writing
2. Illustrating changes then and now
3. Finding sources of information
4. Summarizing facts
5. Persuasive speaking

(continued)

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Students can choose to write to the Chamber of Commerce in any city within the Great Lakes region to obtain information on the city's history, its present social, economic, political, and recreational condition and its outlook for the future.

B. Using the information collected, the student will give a persuasive demonstration speech attempting to convince their audience to move to their particular city. Emphasize specific information concerning how people have changed, are changing, or will change. Students should choose their own special audience, e.g. businessmen, Mr. & Mrs. America.

C. Have students decorate a brown bag as a collage with all the positive aspects of their city on the outside of the bag, and on the inside of the bag put the negative or less desireable aspects of their

(continued)

Outside or Community:

A. Have students find a new area they are not familiar with locally. Have them visit the area and complete the ICE field guide activity sheet, "Here Comes The Judge". Have students give a persuasive speech on their findings. (See complete lesson attached)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	Skills Used: (continued) 6. Appealing to special audience. In-Class: (continued) city. Have students present both sides to class, still persuading and selling their area.
Audio-Visual: Old Magazines Film: The Green City 440 ICE-RMC Film: Urban Sprawl 430 ICE-RMC	"Here Comes the Judge," a modified courtroom simulation teaching unit, was removed due to colored pages which would not reproduce.
Community: Art teachers. Chamber of Commerce. State Historical Society.	

PROJECT I-C-E AVAILABLE A-V RESOURCES -- WRITE/CALL ICE-RMC

Kit 16 Environmental Awareness
Centron Educational Films, 1972
5 filmstrips, 5 records
Grades K-6
Each of the five filmstrips and records was designed to give the elementary student an aesthetic awareness and appreciation for man's physical environment. Titles included are: 1) Colors in Nature, 2) Textures in Nature, 3) Patterns in Nature, 4) Awareness in the City, and 5) Awareness in Forest & Field.

Kit 29 Reinhold Visuals: Part I, Portfolio 7, Perception
Part II, Portfolio 8, Space
Part III, Portfolio 9, Color

Reinhold Book Corp., 1969
24 Color posters in each part
Grades K-12
"The Reinhold Visuals comprise a range of examples as wide as that found in the environment: They represent the art in many ages and places, different media, and diverse modes of expression...Each portfolio describes an element of art (Perception - Space - Color) and provides a coherant & meaningful sequence of ideas." Evocative - provocation - controversial. Stimulates the viewer to take a new look at art and the environment.

Kit 34 Man & His Environment - In Harmony and In Conflict:
Center for Humanities, Inc., New York, 1971
160 slides on 2 carousels, 2 cassettes, 2 records, guide
Grades 7-12
Part I shows how man is dependent on nature, that he is responsible for the neglect of the quality of life and, thus, responsible for creating by himself a harmony with the environment nature has offered him. Part II looks at the cities as centers of conflict. Attempts to show how man can seek to find harmony within the urban society.

HANDOUTS

Shier, Rosalie, Brown County Librarian, "Lifestyles" Book Report. (ICE-RMC)

Froman, Robert, Street Poems, The McCall Publishing Company, New York, (ICE-RMC)

Speaking by Doing, National textbook Co., Skokie, Ill.

Discussion and Debate, National textbook, Skokie, Ill.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 9 Management

SUBJECT Language Arts

ORIENTATION Dependence on Nature in Media

TOPIC/UNIT Advertising

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	Outside or Community:
Cognitive: Write and produce an advertisement for an imaginary product or service. The student may choose radio, T.V. billboard, door-to-door sales pitch, or combined format for the promotion.	A. Teacher leads discussion on use of nature in advertising e.g. Tony the Tiger, Smokey the Bear, "A tiger in your tank" etc. Call on individual students to cite examples from their own exposure to various advertising media. B. Teacher assigns each student to bring in 2 examples for following days discussion. C. After the students share their examples, teacher leads students by way of the examples to discover the following elements in a normal ad: a. Concentration on single idea. b. Effective choice of words. c. The symbol related to some aspect of the product. d. Consider appeal to particular audience. (continued)	A. Teacher may want to take the class to an ad agency, a T.V. or radio continuity department for them to see the actual development of an advertisement.
Affective: Acknowledge man's use of the natural world as a stimulus in modern verbal or written communications by listing several examples.		
Skills Used: 1. Observation 2. Writing and illustrating an advertisement.		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	In-Class: (continued) D. Assign students to make up a product and sell and demonstrate its performance in front of the class. E. Optional Activity: Divide class into groups of 4 and assign or have them choose a different name brand of similar product. e.g. Ban, Right Guard, Arid, Soft and Dry. Have students, promote product through a campaign and have class vote on best campaign. F. Have students complete audience profile in Good Evening Ladies & Germs (ICE-RMC p. 7, before starting campaign. See attached page.)
Audio–Visual:	
Community:	

Audience Profile

1. Who is your audience? (children, adults, teens, married people, men, women). Name your audience.

   _____

2. What's the age level of your show? _____

3. What interests/likes does your audience have?

   _____

   _____

   _____

4. What do they dislike? _____

   _____

   _____

5. What kind or level of language (words) would your audience understand?

   _____

   _____

6. What kind of illustrations, pictures, or art work would interest and inform your audience?

   _____

   _____

7. What kind or type of products would sponsor a show of this type? (You may want to include a commercial as part of your show; this is optional.)

   _____

8. Add any teacher questions: _____

   _____

This can be duplicated for class use if proper credit is given. We're interested in your suggestions and comments.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 10 Economic Planning **SUBJECT** Language Arts

ORIENTATION Resource Conservation **TOPIC/UNIT** Creative Writing

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	**Outside or Community:**
Cognitive: Create or collect ten illustrations and match them with appropriate captions showing the theme: "Today's gains may produce tomorrow's losses". Explain the cause and effect relationship between immediate gains and future losses in writing.	A. View film Cry of the Marsh Boomsville, Junkdump, or other appropriate film as motivational activity. B. In groups of 2 or 3, students will illustrate the theme as stated in the objective through a series of 10 drawings, photographs, slides, pictures from magazines accompanied by quotations appropriate to the pictures. Teachers should encourage creativity. Selected quotations should fit the illustrations. C. Final booklets will be exchanged, and perhaps, critiqued. At least one day should be spent enjoying and sharing with discussion, and student-teacher praise of the best work. D. Through short stories, skits, or dialogue, have students create a family that is being relocated from a Neighborhood due to urban renewal.	A. Have students locate locally, mistakes that have been made in offending good economic planning. B. Have students write to St. Louis Chamber of Congress or metro areas to inquire into their urban renewal programs. Ask specifically about the River Heights program, which was proved disasterous in 3 years. C. Have the city planner speak to class on his job.
Affective: Write an article that indicates the cause and effect relationship between immediate gains and future losses suitable for publication in the school newspaper.		
Skills Used: 1. Illustrating ideas 2. Creative writing 3. Finding quotation sources 4. Group discussion		

(continued)

SUGGESTED RESOURCES

Publications:

Grapes of Wrath
John Steinbeck

Audio–Visual:

Film: Junkdump, Boomsville, Cry of the Marsh, ICE-RMC
Teamwork on the Potomac,
Movie, shows the environmental losses produced by pollution and degrading of the Potomac River.
Interstate Commission on the Potomac River, 407 Global bldg.
1025 Vermont Ave., NW.
Washington, D.C. 20005
Any other movie may be used which shows long-term loss resulting from short-term exploitation.

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

In-Class: (continued)

Questions to stimulate creative writing:

1. What will happen to a family's security feelings after being uprooted to a new neighborhood.
2. Is the economic renewal a "people renewal" also? Or is it technological progress at the expense of human loss?
3. Is the new neighborhood being well planned or just constructed haphazardly?
4. What feelings would you have if you had to move tomorrow?

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 10 Economic Planning

SUBJECT Language Arts

ORIENTATION How Values Affect Lifestyles

TOPIC/UNIT Book Reports and Conferences

BEHAVIORAL OBJECTIVES

Cognitive:

Identify values different from his own and explain how these values are responsible for the difference in:

a. Dress
b. Life Style
c. Attitude toward environment

Affective:

Read books, make reports and hold conferences with the teacher on values and the effect of values on a person's life style.

Accept the lifestyle and values of others even though they are different from his own.

Skills Used:

1. Reading
2. Written book reports
3. Oral conferences

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Teacher will provide bibliography of books with changing lifestyles as a major theme. Available through ICE-RMC, Changing Attitudes by Studying Lifestyles by Reading Books--students select book of choice to read.

B. Teacher-student conferences should be held, emphasizing how the different ways of life are affected by values, either different from the student or the same.
Sample Questions:
1. Where do these values come from?
2. If the main character sticks with these values, what kind of person will they become?

C. Students should write a book report, possible following format provided in ICE field guide, in Part A. (continued)

Outside or Community:

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Changing Attitudes by Studying Lifestyles by Reading Books. ICE-RMC **Audio-Visual:** **Community:**	In-Class: (continued) Have students participate in the Environmental Values Auction Game, ICE-RMC D. As a writing assignment have students incorporate the questions found in field guide Changing Attitudes by Studying Lifestyles Through Reading Books. Compare and contrast can be used well here.

Environmental: Integrated with:

CONCEPT NO. 11-Individual Acts SUBJECT Language Arts

ORIENTATION Environmental Alterations TOPIC/UNIT Reading Biography and Report Writing

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	Outside or Community:
Cognitive: Illustrate by specific written example from a biography the effect of an individual's acts upon his environment.	A. Read the biography of a person who has made significant environmental changes such as Ralph Nader Frank Lolyd Wright, Albert Ernstein or any other writers, explorers etc. A bibliography should be provided for students to choose from. B. Students should then write a report and present it to the class on the pertinent contributions of their individual's biography. C. After viewing the filmstrip "Environmental Crisis: What the Individual Can Do," students should get ideas on how they as individuals can promote action in their own environment, and work out plans to see their projects through.	A. Have students find community people who are environmental leaders in alteration of land use. Invite them to speak to the class on their accomplishments. Sample Questions: 1. What issues have you been involved with? 2. What have you accomplished? 3. What else do you wish to do? 4. How can individuals set involved? Each student prepare a written question for the speaker.
Affective: Appreciate the potential power of one person's acts by reading biographies of persons that had a positive effect on the environment; negative effect on the environment.		
Skills Used: 1. Reading for information 2. Critical thinking 3. Creative writing		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Short stories about, or excerpts from lives of great industrialists, etc. Biographies Encyclopedias Industrialists: Henry Ford Howard Hughes John Deere **Audio–Visual:** Filmstrip Kit Environmental Crisis: What the Individual Can Do. Kt 20 ICE-RMC **Community:**	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 11 Individual Acts

SUBJECT Language Arts

ORIENTATION Rights and Responsibilities

TOPIC/UNIT Reading - Creative Writing

BEHAVIORAL OBJECTIVES

Cognitive:
Evaluate the use of fables in promoting a particular point of view and give reasons.
Identify the main parts of a fable.

Affective:
Accept the multiplier effect of individual acts as being a cause of significant environmental changes.

Write fables by following Aesop's example to illustrate: "Individual acts, duplicated or compounded, produce significant environmental alterations over time."

Skills Used:

1. Identification of style used in fables.
2. Creative writing and moralizing.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

I. Classroom Activity:

A. Teacher will read 1 or 2 of Aesop's fables aloud to the class or show Walt Disney Productions cartoon versions of Aesop's fables.

B. Teacher and students will examine the fables to determine the lesson and how it is exemplified. Discuss the morals in terms of Concept II.

C. Assign the students to write their own fables to show how individual acts duplicated or compounded, produce significant environmental alterations over time.

D. Posters for classroom display should be created to illustrate the fables' moral in regard to Concept II.

E. One day should be spent sharing and enjoying the fables.

F. Optional Activity: Have students pantomime own fable with possible narration by other students.

Outside or Community:

A. Posters or collages may be decorative within the school building.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Horton Hears a Who The Lorax-by Dr. Seuss **Audio-Visual:** Walt Disney cartoons of Aesop's Fables Filmstrip Kit Kt 20 Environmental Crisis: What the Individual Can Do ICE-RMC **Community:**	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: Integrated with:

CONCEPT NO. 12 Stewardship SUBJECT Language Arts

ORIENTATION Pollution TOPIC/UNIT Advertising Public Speaking

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	Outside or Community:
Cognitive: Write and produce public service announcements stressing the idea that private ownership must be regarded as a stewardship of the plant, animal and land usage.	A. Students will create a public service announcement around Concept 12, after listening to demonstration tapes (available through Project ICE). The announcement should use one idea expressed with precise words to fill a 30-45 second time slot. B. Each announcement should be taped with special emphasis on voice expression. C. Promote the public service announcement in the school through posters, P.A. system and possibly in a school assembly with a short skit or dramatic presentation.	A. Go to local radio station to observe and possibly use the taping procedures for radio broadcast. Offer the tapes for public broadcast. B. Have a local television announcer speak to your class on what is crowd appealing through the media.
Affective: Select a public service theme with wide appeal and advertise its promotion. Indicate enthusiasm for promoting the idea of private ownership as a stewardship by voice expression used while presenting his announcements.		
Skills Used: 1. Concentration on single idea. 2. Precise word choice. 3. Public speaking.		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: State Historical Society.	
Audio–Visual:	
Community: Art teachers Chambers of Commerce Radio & TV Stations	

Environmental: Integrated with:

CONCEPT NO. 12 Stewardship SUBJECT Language Arts

ORIENTATION Environmental Leader TOPIC/UNIT Research, Written Report and Speech

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

BEHAVIORAL OBJECTIVES

Cognitive:

Predict the condition of the environment at the present time if there had not been a given person or organization as a leader for the betterment of the environment, ie.

a. John Muir
b. Trees for Tomorrow
c. Save the Eagle foundation
d. etc.,

Affective:

Do research, write a report and prepare a speech concerning environmental leaders.

Skills Used:

1. Research
2. Written Report
3. Speech

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Teacher should illustrate with examples, people who have become leaders in environmental progress.
   1. John Muir
   2. Frank Loyd Wright
   3. Trees for Tomorrow Program (through the paper co.)
   4. Save the Eagle Foundation LaCrosse
   5. Harters of Horicon Marsh

B. With help from the librarian, students should research the above or other leaders.

C. Students should share written reports with class in a speech. Annotations and references should be made concerning their research in both the report and speech.

Outside or Community:

A. Librarian can aid in establishing a bibliography.

B. A possible leader in the field of environmental progress could be asked to address the class.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Audio–Visual: Film 380 ICE-RMC Environmental Enrichment What You Can Do About It Community: Wildlife Sanctuary	